CLINICAL UPDATE

COMMON CLINICAL CHALLENGES

WHY “FORGETTABLE” CONTRACEPTION?

1 million pregnancies/year in the USA are due to incorrect or inconsistent use of OCs

One in three U.S. women will have had an induced abortion by the age of 45

30% pregnancies that go to term in UK are thought to be unplanned

Worldwide usage

- China 90.2% married women aged 15-49 use contraception-highest in the world
- Of these 49.8% use an IUD
- 42.0% use sterilisation
- Only 1.7% use oral or depo
- Thus over 100 million Chinese women use the IUD-two-thirds of total usage worldwide!

Worldwide Usage

- In contrast in India only 1.6% of married women use IUD (after problems in the 1960's with Lippes loop)
- Turkey 20%
- Mexico 14%
- USA 1.3%
- UK 4% (but now rising with IUS)

Myths concerning IUDs

- IUDs cause pelvic infection - NO
- IUDs cause infertility - NO
- IUDs increase ectopic risk - NO
- IUDs unsuitable for nullips - NO
- Must be “on period” to have IUD fitted - NO

ECTOPIC PREGNANCY RISKS

Levonorgestrel IUS	0.20*
Copper IUD	0.34*
No method	1.20-1.60*

***Ectopic pregnancies per 1,000 woman-years**

Andersson. Contraception 1994;49:56.
Sivin. Stud Fam Plann 1983;14:57.

Ectopic pregnancy

- IUD/IUS offer a significant degree of protection from ectopic pregnancy

- But 1 in 20 pregnancies that occur with an IUD/IUS in situ are likely to be ectopic

Mode of action
(devices with > 300 sq.mm of Cu)

- Effect on gametes: primary prevention of fertilisation
- Endometrial effect: secondary prevention of implantation
- Cervical mucus effect: secondary affects sperm penetration

Choice of device

Based on:

- Effectiveness
- clinical need
- client choice

Pre- IUD insertion

A good clinical history including sexual history

STI screening if appropriate. Should we wait for results?

Prophylactic antibiotics?

Appropriate instruments

Local anaesthetic?

Resuscitation equipment and drugs

Bimanual examination – for planned insertion procedure

Insertion

Informed verbal consent

Trained assistant - monitors pulse rate

Meticulous no touch technique

Cleansing of cervix?

Use of Allis or tenaculum, sounding

Good documentation

Follow up

Information – verbal and written

First visit after next period

Teach thread check – emphasize client responsibility

When to return - ? Annual visits

Issues

PID – post insertion, late

Perforation

Expulsion

Lost threads

Pregnancy

Bleeding problems

PID AND INFERTILITY?

- Risk of PID with IUD use is low; relates to insertion process and background risk of STDs
- Any risk of infection associated with the IUD relates to insertion
- History of PID is not contraindication for use of all IUDs

Grimes DA. Lancet. 2000;356:1013.

Timing of insertion/removal

- Anytime in menstrual cycle - exclude pregnancy
- Post abortion / post partum / EC
- Establish continuing contraception if desired
- Perimenopause

IUS

Levonorgestrel releasing IU system

Failure rate 0.2/100WY

Five year license

Reduces menstrual flow

Gynaecological uses

- menorrhagia, endometriosis
- HRT * 5YR license

Mode of action

- Endometrial atrophy - primary
- Cervical mucus effect – secondary
- Ovulation suppression - secondary

Issues

Timing of insertion/ Extra precautions

Hormonal side effects

Ovarian cysts

Ectopic pregnancy ?

Management of bleeding problems

Diagnosis of menopause

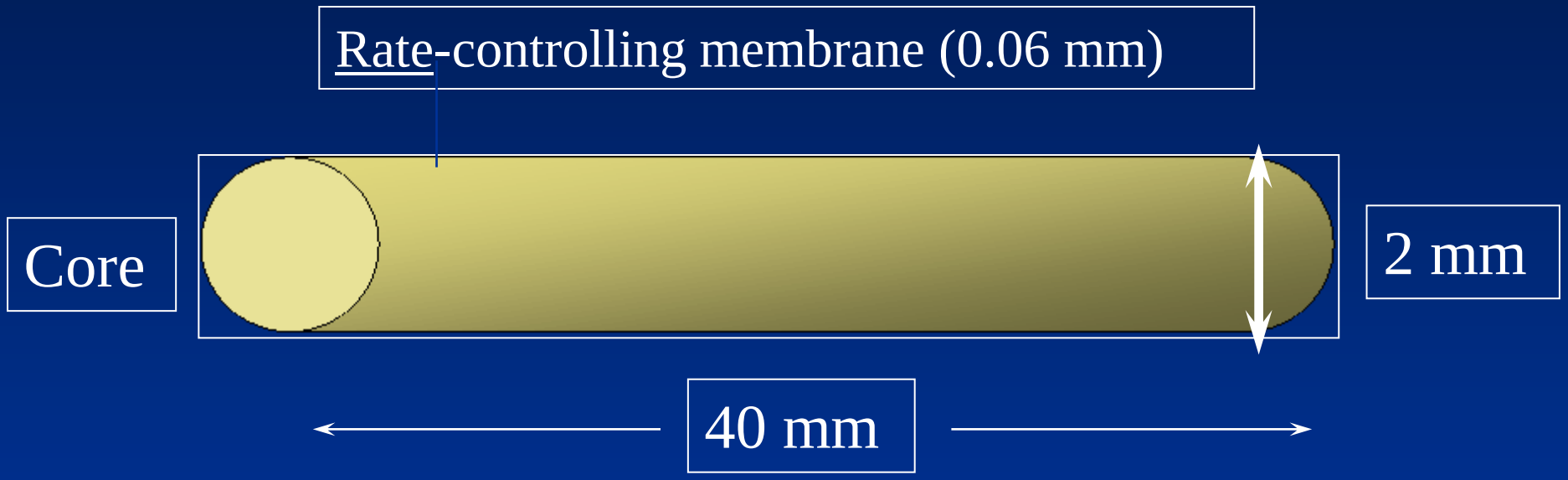
Summary

The TCu380S/A and the LNG-IUS are the most effective intrauterine devices available.

T 380S/A and Mirena are virtually no different in terms of efficacy and are comparable to female tubal occlusion.

Devices with <200 sq.mm of Cu are obsolete for long term use as they perform significantly less well in preventing both intrauterine and ectopic pregnancies.

Implanon NXT



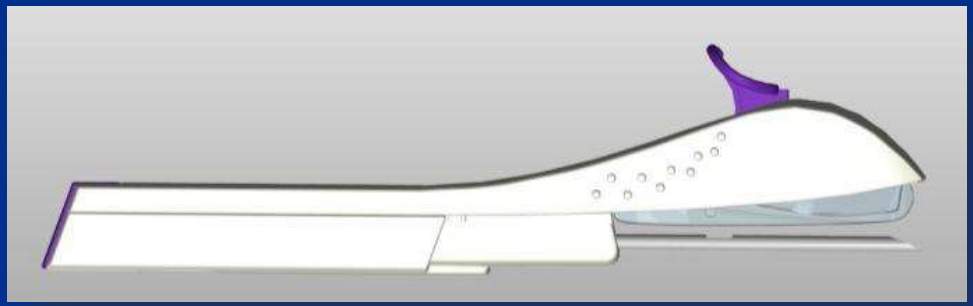
Core:
- 37% ethylene vinyl acetate (EVA)
- 60% etonogestrel (68 mg)
- **3% barium sulphate (15 mg)**

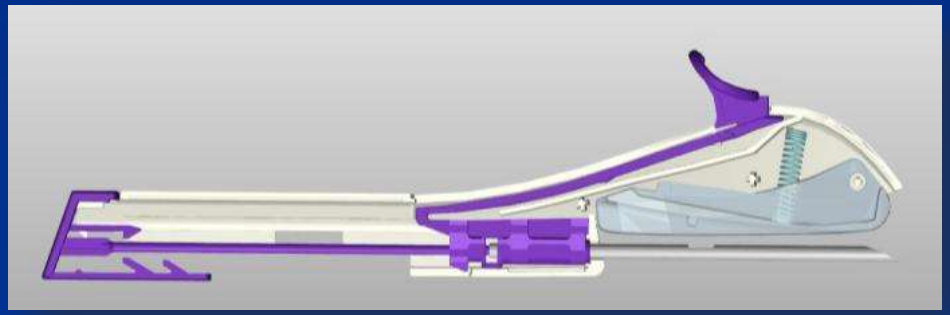
Membrane: 100% EVA

Applicator

Applicator design elements:

- Cap-blocking mechanism with cap/lever
- Implant retained in needle before insertion
- Single-handed movement with slider
- Self-explaining actions
- Needle partly visible

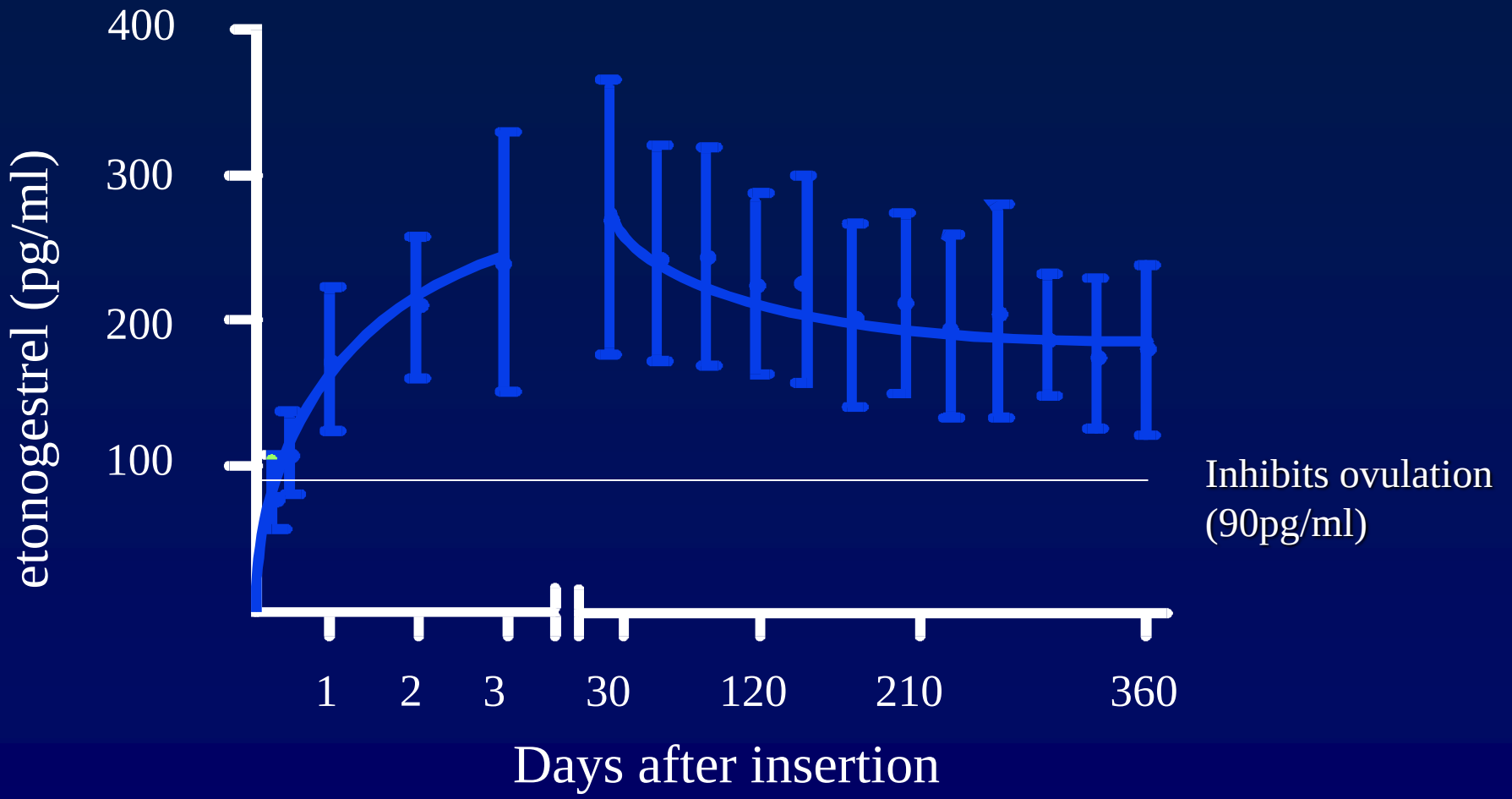




Mode of action

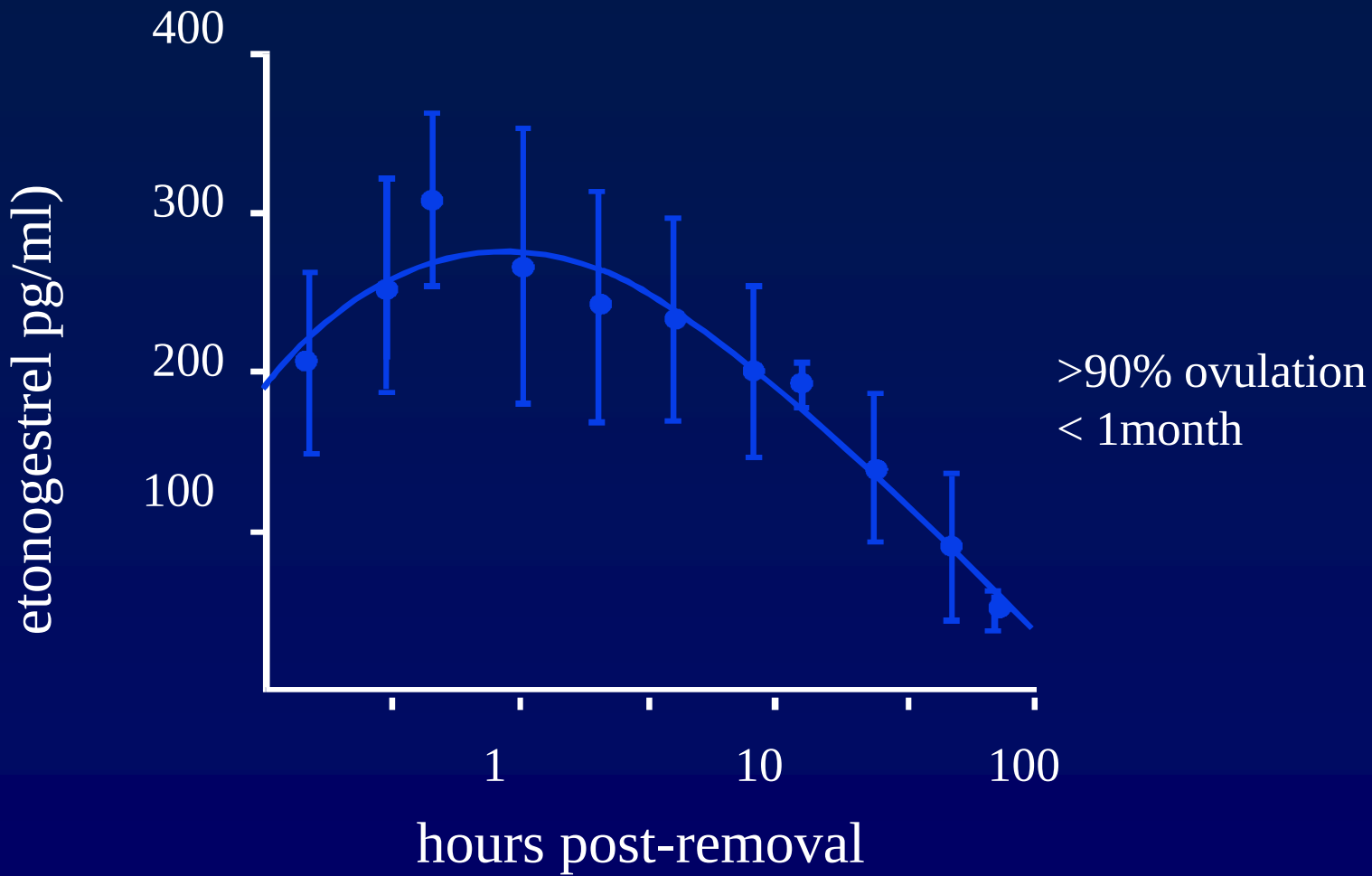
- Ovulation inhibition : primary effect
- Effect on cervical mucus : secondary effect

Pharmacokinetics



Contraception 1993; 47: 251

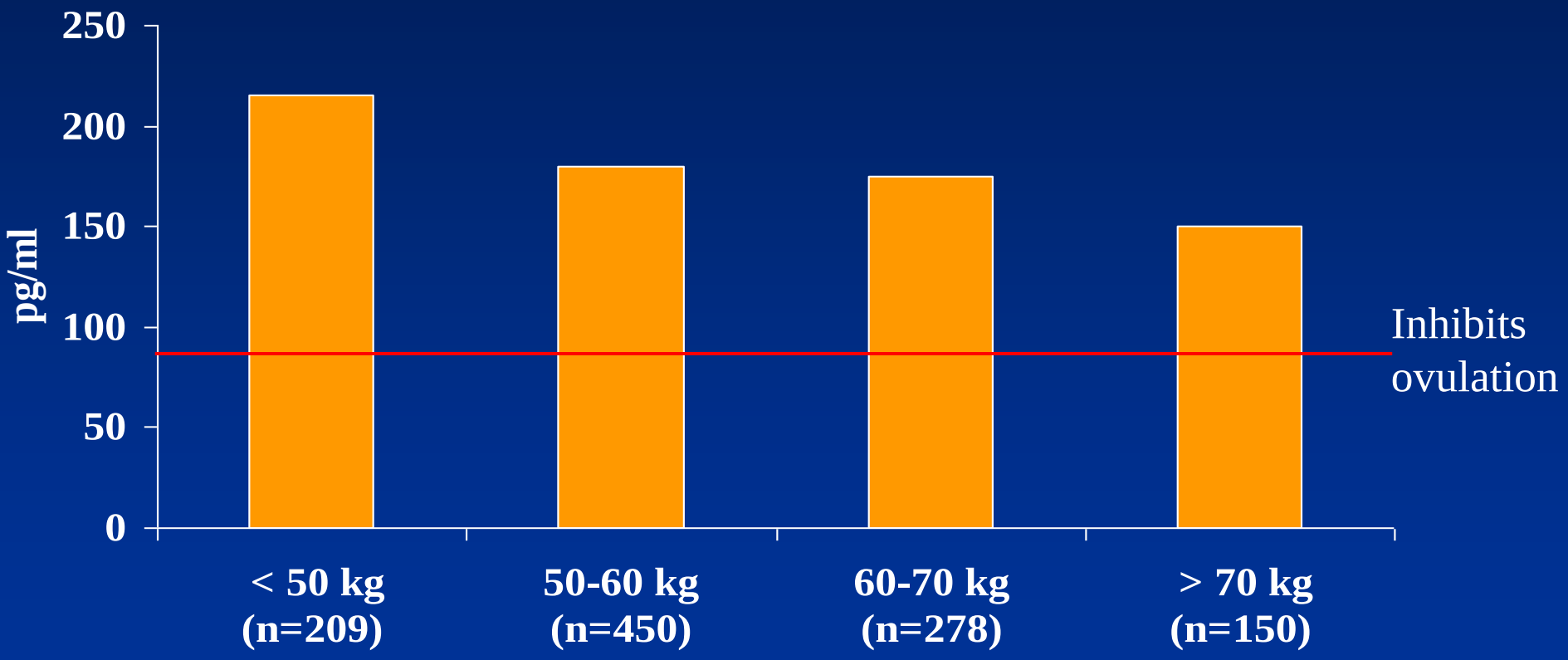
Circulating levels post removal



Contraception 1993; 47: 251

Serum etonogestrel levels

Effect of weight



Contraception 1998;58:85S-90S

Bone mineral density after two years of Implanon® (n= 44) or IUD (n=29)

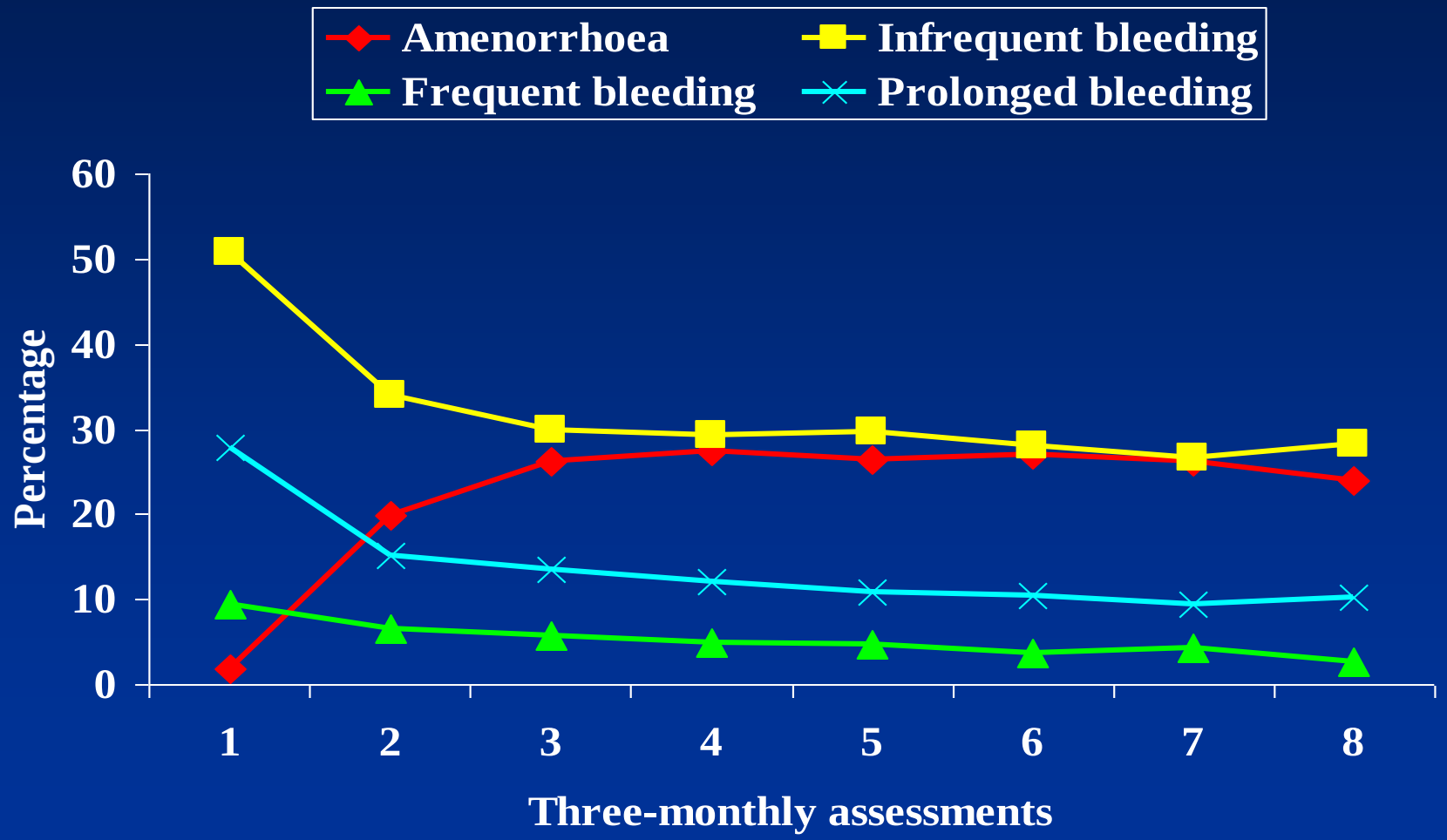
Average z-scores

Site	Implanon mean	IUD mean	Imp-IUD difference	p-value
Lumber spine	0.165	0.037	0.128	0.07
Femoral neck	-0.016	0.069	-0.085	0.33

Hum Reprod 1999

Bleeding patterns with Implanon®

All studies



Br J Fam Plann 1999;24

Adverse experiences

Implanon ®(n=184) versus Multi-implant device (n=184)

Adverse exp.	**Implanon** (%)	Multi-implant device
Acne	19	21
Breast pain	10	11
Headache	17	20
Weight increase	6.5	7
Dizziness	6.5	7
Abdominal pain	8	8
Emotional lability	5	8
Libido decreased	3	5
Nausea	3	5

Contraception 1998; 58: 109S-115S

Body weight
Comparative 2-year study (n=180)

Method	Change in body weight
Implanon	+ 2.6%
Multi-implant device	+ 2.9%
Copper IUD	+ 2.4%

Contraception 1998; 58: 99S-115S

Implanon®: Drug Interactions

- No specific interaction studies performed
- On basis of interactions of other contraceptives, interactions may be expected during concomitant use with liver enzyme inducing drugs
- Where this is the case advise use of an additional contraceptive method

Patient counselling

Present contraceptive menu and enable informed choice - Advantages and limitations of all suitable options

Some clinical challenges

Siobhan had an Implant inserted at a London University Student Health Centre 5 months ago. She is now home but wants the implant out as she has been bleeding frequently since the insertion.

When you examine her, you can not feel the implant.

What will you do?

Ultrasound?

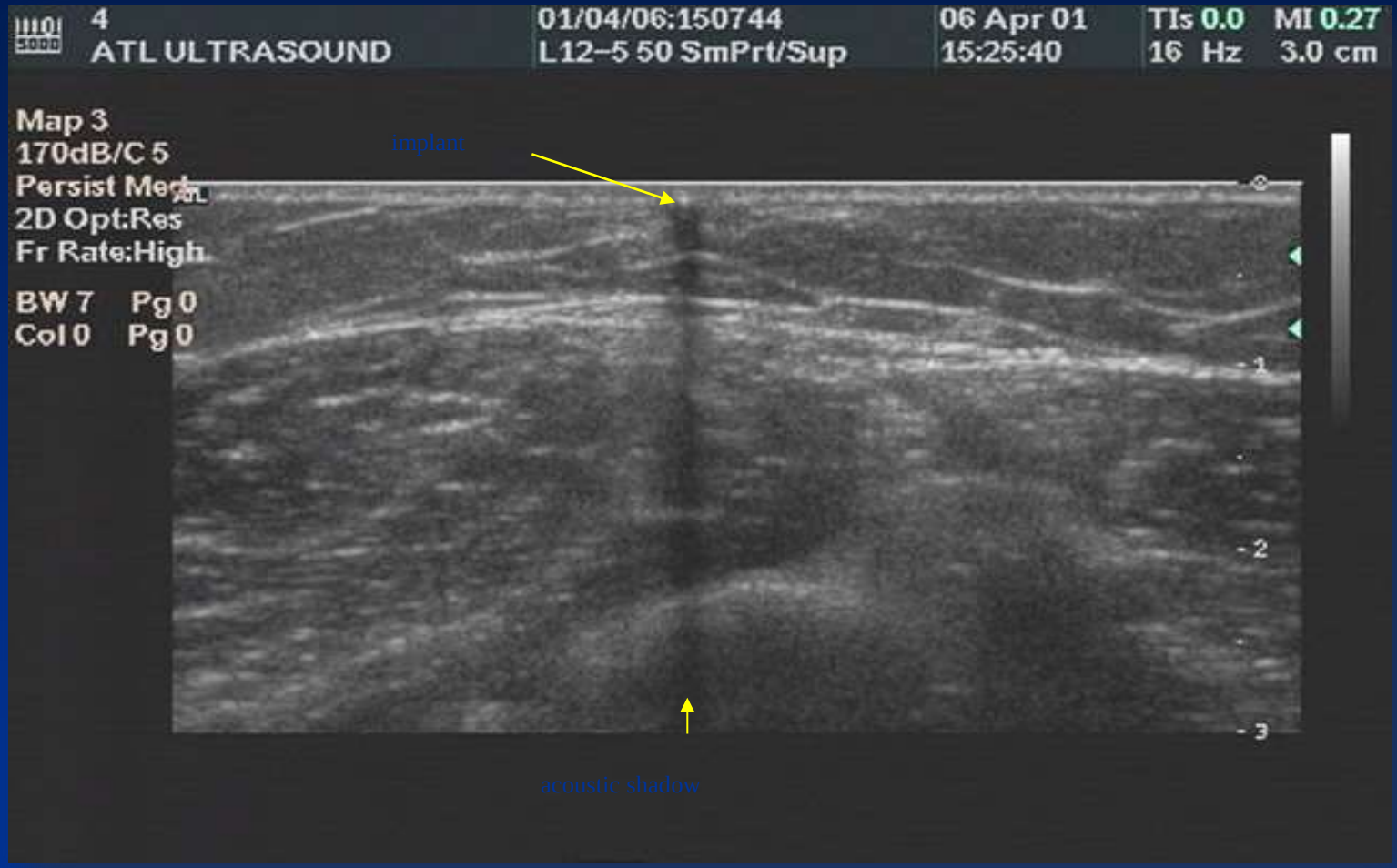
X- ray?

Blood tests?

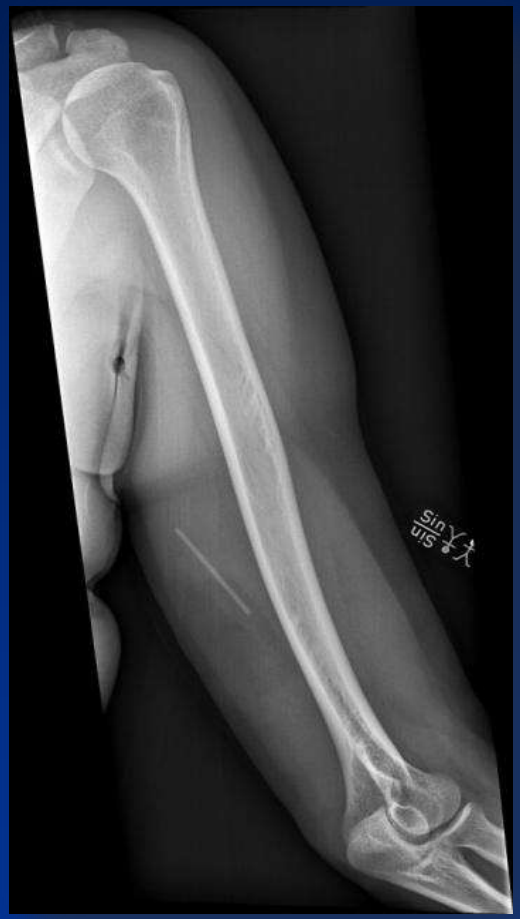
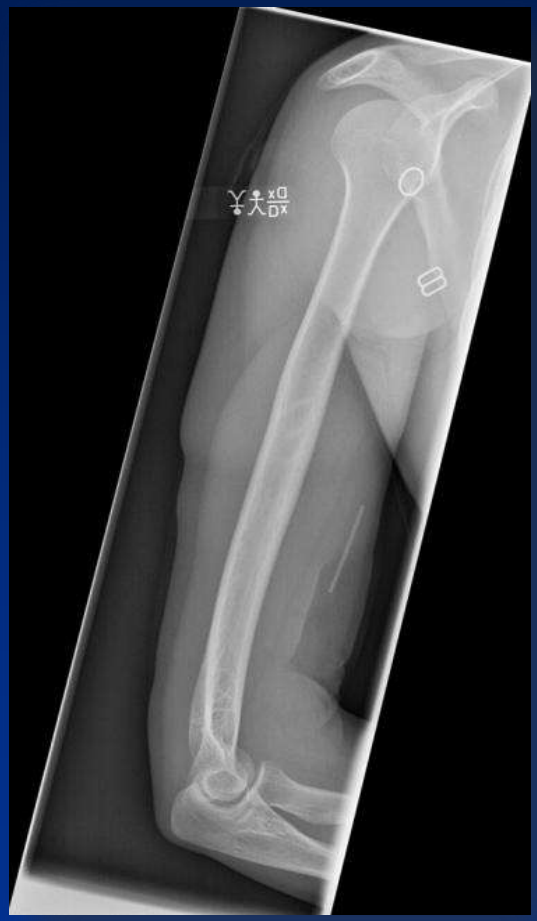
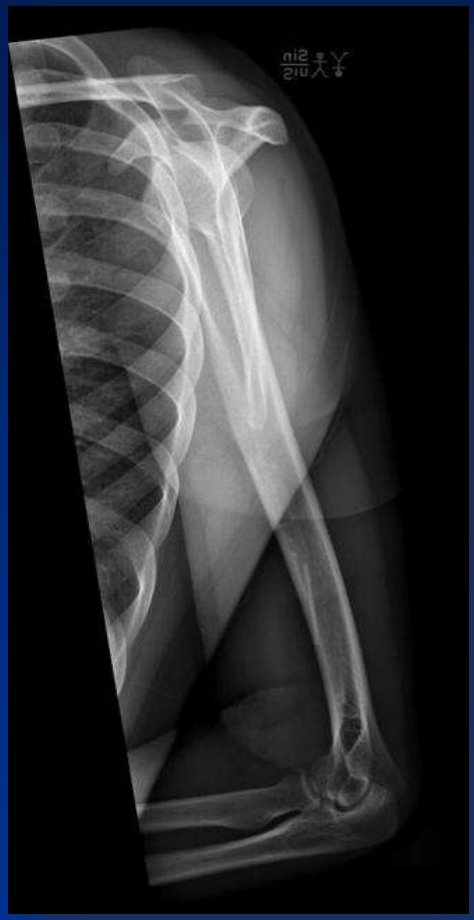
Local referral pathway

Interim contraception??

Properly Inserted Implanon® Transverse Image



Radiopaque Implant
Localisation X-ray

Would you offer Mary an IUD?

- Mary is 15
- She was raped on the way back from the a party three days ago
- She does not know her attacker
- She has never had SI before
- She can’t remember much about exactly what happened
- She was day 12 of a regular cycle
- She attends alone

Would you offer Mary an IUD?

- She is adamant she does not want any risk of pregnancy
- She is Fraser competent
- She is staying with her boyfriend's family but usually lives in Cork

How do you manage Cheryl?

- Routine IUS fitting
- Had two normal deliveries, aged 32
- A bit anxious
- Fitting took a bit longer than you expected
- Vasovagal with transient loss of consciousness
- P initially 40
- After 5 minutes P 48 but just talking to you
- After 15 minutes P still 48 but talking ok

Pulse rate should be measured and documented post-IUD insertion

- Pre insertion pulse rate gives you a baseline
- Gives the assistant a definite role

She’s a fitness instructor

Would you fit an IUD for Frances?

- She is 28
- Had one normal delivery 2 years ago
- Stable relationship, negative CT within this relationship
- Had a medical abortion 11 days ago
- Virtually stopped bleeding
- Had UPSI two nights ago

How soon after abortion can an IUD/IUS be fitted?

- WHO
  - Immediately post abortion
- RCOG
  - Immediately post 1st and 2nd trimester abortion
- NICE
  - Immediately the procedure is complete
- UK MEC
  - Immediately following surgical or after second part of medical abortion

What does this mean in practice?

- How sure can you be clinically that the medical abortion is complete?
- Did she definitely pass POCs?
- Pregnancy test not helpful
- Access to scanning if in doubt

Should Maureen have an IUS?

- She is 46 and had three vaginal deliveries
- Her bleeding is “all over the place”
- It is getting her down
- Used COC until she divorced 4 years ago
- Her sister has an IUS and Maureen would like one

Should Maureen have an IUS?

- Is it heavy menstrual bleeding?
- Is there any pathology?
  - Irregular bleeding
  - Sudden changes
  - IMB
  - PCB
  - Dyspareunia
  - Pelvic pain
  - Premenstrual pain
  - Chlamydia

Should Maureen have an IUS?

- NICE guidelines on Heavy Menstrual Bleeding
- Take a history
  - Gynecological
  - Sexual (STI/contraception)
- Examine
  - Visualise the cervix
  - PV
  - USS
  - Endometrial assessment

What do you do about IUD follow-up?

Every woman should know

Why she should check her threads

How to check her threads and how often

Where to go if she has any concerns about

- bleeding
- pain
- discharge

Access to follow up whenever she needs it

- WHO, CEU, NICE all state

A follow-up visit should be advised after
the first menses, or 3-6 weeks, after IUD insertion

All based on each other. Evidence level 4 = Expert opinion, formal consensus

Does formal follow up reduce the risk of complications?

What do you do at a follow up?

Do you examine all even if they say they checked their threads and are quite happy?

Might she complain about an unnecessary examination?

Do you know who DNAs?

Do you chase them?

Should I test for Chlamydia before IUD/IUS insertion?

- Chlamydia is common
- Associated with pathology
- Usually asymptomatic
- Easy to test
- Easy to treat

Who has chlamydia?

If I test all I wont miss any

Yes, BUT

Why not test ALL for chlamydia?

- Informed choice
- Can you assess your risk?
- Are you calling them liars?
- Whose life is it anyway?
- Empowerment
- Could your test ever be false positive?
- What consequences might it have for the couple?
- Could she complain against you for not warning her of the consequences?

STI risk assessment should be performed for all women considering an IUD

Women assessed to have a higher risk of STI should be offered testing for CT (as a minimum) prior to IUD insertion

- How good is your sexual history taking?
- How good is your record keeping?

Will you fit Nazneen with an IUD?

- Two normal deliveries
- Stable relationship, negative CT test
- Cycle regular 5/30 and not heavy
- LMP 17/7 ago
- No other contraception used

Where in the cycle can I fit an IUD?

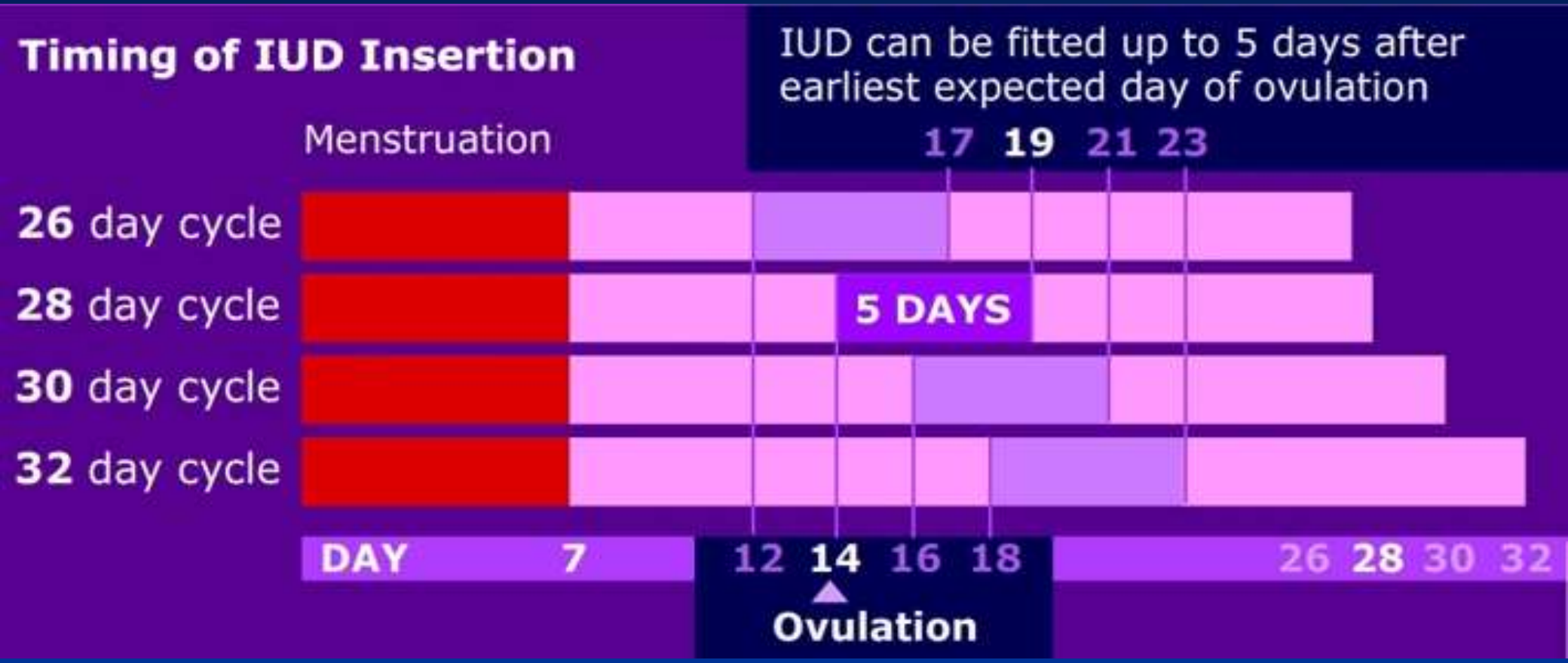
- Up to day 5 after ovulation

  or

- Up to 5 days after first UPSI

  - whichever is the longer

Where in the cycle can I fit an IUD?



What about unanswered questions?

- Re-read current guidance
- Read future guidance
- Phone a friend
- Discuss your uncertainties with the woman
- Know your limits and know your referral pathways